

SEQUENCE LISTING

<110> OLSON, ERIC
FREY, NORBERT

<120> METHODS AND COMPOSITIONS RELATING TO MUSCLE SPECIFIC
CALCINEURIN ASSOCIATED PROTEIN (CAP)

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<141> 2001-11-07

<150> 60/246,629

<151> 2000-11-07

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<170> PatentIn Ver. 2.1

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His Leu Ser Asn Arg Gly Ala Arg Leu Phe Lys Met Arg Gln Arg Arg
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Ser Asp Lys Tyr Thr Phe Glu Asn Phe Gln Tyr Gln Ser Arg Ala Gln
  65              70              75              80

Ile Asn His Ser Ile Ala Met Gln Asn Gly Lys Val Asp Gly Ser Asn
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Asp Pro Arg Ser Pro Pro Asn Pro Asp Asn Ile Ala Pro Gly Tyr Ser
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Leu Ser Leu Leu Thr Asn Arg Gly Ser Lys Met Phe Lys Leu Arg Gln
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Met Arg Val Glu Lys Phe Ile Tyr Glu Asn His Pro Asp Val Phe Ser
      65              70              75              80

Asp Ser Ser Met Asp His Phe Gln Lys Phe Leu Pro Thr Val Gly Gly
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Gln Leu Glu Thr Ala Gly Gln Gly Phe Ser Tyr Gly Lys Gly Ser Ser
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      35              40              45

His Phe Ser Asn Arg Gly Ala Arg Leu Phe Lys Met Arg Gln Arg Arg
 50              55              60

Ser Asp Lys Tyr Thr Phe Glu Asn Phe Gln Tyr Glu Ser Arg Ala Gln
 65              70              75              80

Ile Asn His Asn Ile Ala Met Gln Asn Gly Arg Val Asp Gly Ser Asn
      85              90              95

Leu Glu Gly Gly Ser Gln Gln Gly Pro Ser Thr Pro Pro Asn Thr Pro
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Asp Pro Arg Ser Pro Pro Asn Pro Glu Asn Ile Ala Pro Gly Tyr Ser
     115              120              125
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<213> Homo sapiens

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 Pro Glu Gly Pro Asn Tyr Arg Ser Glu Leu His Ile Phe Pro Ala Ser
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 Pro Gly Ala Ser Leu Gly Gly Pro Glu Gly Ala His Pro Ala Ala Ala
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 Pro Ala Gly Cys Val Pro Ser Pro Ser Ala Leu Ala Pro Gly Tyr Ala
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 Glu Pro Leu Lys Gly Val Pro Pro Glu Lys Phe Asn His Thr Ala Ile
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 Pro Lys Gly Tyr Arg Cys Pro Trp Gln Glu Phe Val Ser Tyr Arg Asp
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 Tyr Gln Ser Asp Gly Arg Ser His Thr Pro Ser Pro Asn Asp Tyr Arg
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 Asn Phe Asn Lys Thr Pro Val Pro Phe Gly Gly Pro Leu Val Gly Gly
 195 200 205
 Thr Phe Pro Arg Pro Gly Thr Pro Phe Ile Pro Glu Pro Leu Ser Gly
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<212> DNA

<213> Mus musculus

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                35                      40                      45

Ser Leu Leu Phe Gln Lys Arg Gln Arg Arg Val Gln Lys Phe Thr Phe
  50                      55                      60

Glu Leu Ser Glu Ser Leu Gln Ala Ile Leu Ala Ser Ser Ala Arg Gly
  65                      70                      75                      80

Lys Val Ala Gly Arg Ala Ala Gln Ala Thr Val Pro Asn Gly Leu Glu
                85                      90                      95

Glu Gln Asn His His Ser Glu Thr His Val Phe Gln Gly Ser Pro Gly
                100                      105                      110

Asp Pro Gly Ile Thr His Leu Gly Ala Ala Gly Thr Gly Ser Val Arg
                115                      120                      125

Ser Pro Ser Ala Leu Ala Pro Gly Tyr Ala Glu Pro Leu Lys Gly Val
                130                      135                      140

Pro Pro Glu Lys Phe Asn His Thr Ala Ile Pro Lys Gly Tyr Arg Cys
145                      150                      155                      160

Pro Trp Gln Glu Phe Thr Ser Tyr Gln Asp Tyr Ser Ser Gly Ser Arg
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Ser His Thr Pro Ile Pro Arg Asp Tyr Arg Asn Phe Asn Lys Thr Pro
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SEQUENCE LISTING

<110> OLSON, ERIC
FREY, NORBERT

<120> METHODS AND COMPOSITIONS RELATING TO MUSCLE SPECIFIC
CALCINEURIN ASSOCIATED PROTEIN (CAP)

<130> UTSD:729US

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<141> 2001-11-07

<150> 60/246,629

<151> 2000-11-07

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<212> DNA

<213> Homo sapiens

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      20                      25                      30

Gly Lys Lys Val Ser Ile Pro Arg Asp Ile Met Leu Glu Glu Leu Ser
      35                      40                      45

His Leu Ser Asn Arg Gly Ala Arg Leu Phe Lys Met Arg Gln Arg Arg
      50                      55                      60

Ser Asp Lys Tyr Thr Phe Glu Asn Phe Gln Tyr Gln Ser Arg Ala Gln
      65                      70                      75                      80

Ile Asn His Ser Ile Ala Met Gln Asn Gly Lys Val Asp Gly Ser Asn
      85                      90                      95

Leu Glu Gly Gly Ser Gln Gln Ala Pro Leu Thr Pro Pro Asn Thr Pro
      100                      105                      110

Asp Pro Arg Ser Pro Pro Asn Pro Asp Asn Ile Ala Pro Gly Tyr Ser
      115                      120                      125

Gly Pro Leu Lys Glu Ile Pro Pro Glu Lys Phe Asn Thr Thr Ala Val
      130                      135                      140

Pro Lys Tyr Tyr Gln Ser Pro Trp Glu Gln Ala Ile Ser Asn Asp Pro
      145                      150                      155                      160

Glu Leu Leu Glu Ala Leu Tyr Pro Lys Leu Phe Lys Pro Glu Gly Lys
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Gly Gly Phe Glu Lys Ala Ser Arg Met Val Lys Phe Lys Val Pro Asp
 195 200 205

Phe Glu Leu Leu Leu Leu Thr Asp Pro Arg Phe Met Ser Phe Val Asn
 210 215 220

Pro Leu Ser Gly Arg Arg Ser Phe Asn Arg Thr Pro Lys Gly Trp Ile
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25	Glu	Ser	Ser
30	Gly	Leu	
Asn	Leu	Gly	Lys
35	Lys	Ile	Ser
40	Val	Pro	Arg
45	Asp	Val	Met
Leu	Ser	Leu	Leu
50	Thr	Asn	Arg
55	Gly	Ser	Lys
60	Met	Phe	Lys
Leu	Arg	Gln	
Met	Arg	Val	Glu
65	Lys	Phe	Ile
70	Tyr	Glu	Asn
75	His	Pro	Asp
80	Val	Phe	Ser
Asp	Ser	Ser	Met
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90	Gln	Lys	Phe
95	Leu	Pro	Thr
Val	Gly	Gly	
Gln	Leu	Glu	Thr
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105	Gly	Phe	Ser
110	Tyr	Gly	Lys
Gly	Gly	Gln	Ala
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120	Gly	Ser	Ala
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Arg	His	Gln	Gln
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135	Phe	Gly	Ala
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155	Thr	Val	Gly
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170	Ala	Gly	Gly
175	Asp	Gly	Lys
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Val	Phe	Lys	Thr
180	Tyr	Ile	Ser
185	Pro	Trp	Asp
190	Arg	Ala	Met
Gly	Val	Asp	
Pro	Gln	Gln	Lys
195	Val	Glu	Leu
200	Gly	Ile	Asp
205	Leu	Leu	Ala
Tyr	Gly	Ala	
Lys	Ala	Glu	Leu
210	Pro	Lys	Tyr
215	Lys	Ser	Phe
220	Asn	Arg	Thr
Tyr	Gly	Gly	Tyr
225	Glu	Lys	Ala
230	Ser	Lys	Arg
235	Met	Thr	Phe
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Lys	Phe	Asp	Leu
245	Gly	Pro	Leu
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265	Phe	Asn	Arg
270	Thr	Pro	Ile
Leu	Ser	Ser	Gly
275	Glu	His	Val
280	Asp	Tyr	Asn
285	Val	Asp	Val
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295	Leu		

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<212> PRT
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35 40 45
Leu Ser Leu Leu Thr Asn Arg Gly Ser Lys Met Phe Lys Leu Arg Gln
50 55 60
Met Arg Val Glu Lys Phe Ile Tyr Glu Asn His Pro Asp Val Phe Ser
65 70 75 80
Asp Ser Ser Met Asp His Phe Gln Lys Phe Leu Pro Thr Val Gly Gly
85 90 95

Gln Leu Gly Thr Ala Gly Gln Gly Phe Ser Tyr Ser Lys Ser Asn Gly
100 105 110

Arg Gly Gly Ser Gln Ala Gly Gly Ser Gly Ser Ala Gly Gln Tyr Gly
115 120 125

Ser Asp Gln Gln His His Leu Gly Ser Gly Ser Gly Ala Gly Gly Thr
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Gly Gly Pro Ala Gly Gln Ala Gly Lys Gly Gly Ala Ala Gly Thr Thr
145 150 155 160

Gly Val Gly Glu Thr Gly Ser Gly Asp Gln Ala Gly Gly Glu Gly Lys
165 170 175

His Ile Thr Val Phe Lys Thr Tyr Ile Ser Pro Trp Glu Arg Ala Met
180 185 190

Gly Val Asp Pro Gln Gln Lys Met Glu Leu Gly Ile Asp Leu Leu Ala
195 200 205

Tyr Gly Ala Lys Ala Glu Leu Pro Lys Tyr Lys Ser Phe Asn Arg Thr
210 215 220

Ala Met Pro Tyr Gly Gly Tyr Glu Lys Ala Ser Lys Arg Met Thr Phe
225 230 235 240

Gln Met Pro Lys Phe Asp Leu Gly Pro Leu Leu Ser Glu Pro Leu Val
245 250 255

Leu Tyr Asn Gln Asn Leu Ser Asn Arg Pro Ser Phe Asn Arg Thr Pro
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<211> 264

<212> PRT

<213> Mus musculus

<400> 8

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Gly Lys Lys Val Ser Ile Pro Arg Asp Ile Met Ile Glu Glu Leu Ser
      35                      40                      45

His Phe Ser Asn Arg Gly Ala Arg Leu Phe Lys Met Arg Gln Arg Arg
      50                      55                      60

Ser Asp Lys Tyr Thr Phe Glu Asn Phe Gln Tyr Glu Ser Arg Ala Gln
      65                      70                      75                      80

Ile Asn His Asn Ile Ala Met Gln Asn Gly Arg Val Asp Gly Ser Asn
      85                      90                      95

Leu Glu Gly Gly Ser Gln Gln Gly Pro Ser Thr Pro Pro Asn Thr Pro
      100                      105                      110

Asp Pro Arg Ser Pro Pro Asn Pro Glu Asn Ile Ala Pro Gly Tyr Ser
      115                      120                      125

Gly Pro Leu Lys Glu Ile Pro Pro Glu Arg Phe Asn Thr Thr Ala Val
      130                      135                      140

Pro Lys Tyr Tyr Arg Ser Pro Trp Glu Gln Ala Ile Gly Ser Asp Pro
      145                      150                      155                      160

Glu Leu Leu Glu Ala Leu Tyr Pro Lys Leu Phe Lys Pro Glu Gly Lys
      165                      170                      175

Ala Glu Leu Arg Asp Tyr Arg Ser Phe Asn Arg Val Ala Thr Pro Phe
      180                      185                      190

Gly Gly Phe Glu Lys Ala Ser Lys Met Val Lys Phe Lys Val Pro Asp
      195                      200                      205

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Phe Glu Leu Leu Leu Leu Thr Asp Pro Arg Phe Leu Ala Phe Ala Asn
 210 215 220
 Pro Leu Ser Gly Arg Arg Cys Phe Asn Arg Ala Pro Lys Gly Trp Val
 225 230 235 240
 Ser Glu Asn Ile Pro Val Val Ile Thr Thr Glu Pro Thr Glu Asp Ala
 245 250 255
 Thr Val Pro Glu Ser Asp Asp Leu
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<210> 9
 <211> 3330
 <212> DNA
 <213> Homo sapiens

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<210> 10

<211> 251

<212> PRT

<213> Homo sapiens

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Pro Gln Asp Leu Met Met Glu Glu Leu Ser Leu Arg Asn Asn Arg Gly
35 40 45

Ser Leu Leu Phe Gln Lys Arg Gln Arg Arg Val Gln Lys Phe Thr Phe
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Glu Leu Ala Ala Ser Gln Arg Ala Met Leu Ala Gly Ser Ala Arg Arg
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Lys Val Thr Gly Thr Ala Glu Ser Gly Thr Val Ala Asn Ala Asn Gly
85 90 95

Pro Glu Gly Pro Asn Tyr Arg Ser Glu Leu His Ile Phe Pro Ala Ser
100 105 110

Pro Gly Ala Ser Leu Gly Gly Pro Glu Gly Ala His Pro Ala Ala Ala
115 120 125

Pro Ala Gly Cys Val Pro Ser Pro Ser Ala Leu Ala Pro Gly Tyr Ala
130 135 140

Glu Pro Leu Lys Gly Val Pro Pro Glu Lys Phe Asn His Thr Ala Ile
 145 150 155 160
 Pro Lys Gly Tyr Arg Cys Pro Trp Gln Glu Phe Val Ser Tyr Arg Asp
 165 170 175
 Tyr Gln Ser Asp Gly Arg Ser His Thr Pro Ser Pro Asn Asp Tyr Arg
 180 185 190
 Asn Phe Asn Lys Thr Pro Val Pro Phe Gly Gly Pro Leu Val Gly Gly
 195 200 205
 Thr Phe Pro Arg Pro Gly Thr Pro Phe Ile Pro Glu Pro Leu Ser Gly
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 Leu Glu Leu Leu Arg Leu Arg Pro Ser Phe Asn Arg Val Ala Gln Gly
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 <213> Mus musculus

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 <211> 245
 <212> PRT
 <213> Mus musculus

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20 25 30

Pro Gln Asp Leu Met Ile Glu Glu Leu Ser Leu Arg Asn Asn Arg Gly
35 40 45

Ser Leu Leu Phe Gln Lys Arg Gln Arg Arg Val Gln Lys Phe Thr Phe
50 55 60

Glu Leu Ser Glu Ser Leu Gln Ala Ile Leu Ala Ser Ser Ala Arg Gly
65 70 75 80

Lys Val Ala Gly Arg Ala Ala Gln Ala Thr Val Pro Asn Gly Leu Glu
85 90 95

Glu Gln Asn His His Ser Glu Thr His Val Phe Gln Gly Ser Pro Gly
100 105 110

Asp Pro Gly Ile Thr His Leu Gly Ala Ala Gly Thr Gly Ser Val Arg
115 120 125

Ser Pro Ser Ala Leu Ala Pro Gly Tyr Ala Glu Pro Leu Lys Gly Val
130 135 140

Pro Pro Glu Lys Phe Asn His Thr Ala Ile Pro Lys Gly Tyr Arg Cys
145 150 155 160

Pro Trp Gln Glu Phe Thr Ser Tyr Gln Asp Tyr Ser Ser Gly Ser Arg
165 170 175

Ser His Thr Pro Ile Pro Arg Asp Tyr Arg Asn Phe Asn Lys Thr Pro
180 185 190

Val Pro Phe Gly Gly Pro His Val Arg Glu Ala Ile Phe His Ala Gly
195 200 205

Thr Pro Phe Val Pro Glu Ser Phe Ser Gly Leu Glu Leu Leu Arg Leu
210 215 220

Arg Pro Asn Phe Asn Arg Val Ala Gln Gly Trp Val Arg Lys Leu Pro
225 230 235 240

Glu Ser Glu Glu Leu
245